City of Rockville

Development Fiscal Impact Analysis

Prepared by

Municipal & Financial Services Group

In Association with

ERM

December 18, 2012

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Ms. Susan Swift, Director
Community Planning and Development Services
City of Rockville
111 Maryland Avenue
Rockville, MD 20850

Reference: Development Fiscal Impact Analysis

Ms. Swift:

Environmental Resources Management (ERM) and the Municipal & Financial Services Group (MFSG) are pleased to submit the enclosed Development Fiscal Impact Analysis Report completed for the City of Rockville. The report provides our analysis of the fiscal impact of existing and future development within the City. It has been our distinct pleasure to work with and for the City of Rockville. We look forward to future opportunities to work with and for the City of Rockville.

Very truly yours,

David A. Hyder
Vice President
Municipal & Financial Services Group

Clive Graham
Partner
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I. STUDY OVERVIEW AND APPROACH

1.0 Background

Rockville is the third-largest city in the State of Maryland, with a current population of slightly over 60,000. The land area of the City is about fourteen square miles, and the City is largely built out with respect to new greenfield development. A considerable portion of current construction that occurs in the City is redevelopment of existing property (sometimes with higher density development, reflecting the high value of the underlying land) or infill of the relatively small amounts of undeveloped land within the City's boundaries. The City of Rockville has grown from a small suburban community to an urban center over a period of less than fifty years. Due to the City's many assets combined with its location within the greater Washington DC area, the City will undoubtedly continue to grow and redevelop. While there are a host of considerations that the City uses to guide its growth and redevelopment policy, the fiscal impact of development is a key factor that should not be ignored.

To assist the City with evaluating the fiscal impact of future development or redevelopment, the City engaged Environmental Resources Management (ERM) and the Municipal & Financial Services Group (MFSG) to conduct a high level development fiscal impact analysis for the City. A fiscal impact analysis examines whether revenues generated by development are sufficient to cover the resulting costs (operating and capital) from the development for services provided. This type of analysis is often used as one factor related to understanding the consequences of the location, type, density and intensity of new development or redevelopment. Other factors such as economic development[1], traffic and transportation, environmental protection are generally also used in weighing development decisions.

2.0 Approach

In Maryland, local land use decisions are primarily based on adopted comprehensive plans that consider multiple elements, such as existing and needed infrastructure, protection of the environment, economic development, housing options and community character. Well-planned projects will include a healthy mix of commercial and residential uses, promoting strong community centers. The use of fiscal impact analysis is becoming increasingly common in Maryland communities in their development of their respective comprehensive plans to proactively evaluate cost of growth and assist in determining its fiscal impacts. Alternatively, as is the case with the City of Rockville, fiscal impact analysis can follow the development/adoption of a comprehensive plan to investigate the fiscal impact of plan implementation.

In general, fiscal impact analysis estimates the operating and capital impacts of new development on the finances of a local government. The goal is to ascertain to what extent a proposed project, commercial, residential or mixed-use, pays for itself by comparing generated

[1] Broad economic as opposed to purely fiscal (tax) considerations.

revenues with incurred costs. Credible, objective fiscal impact analysis provides elected and appointed officials, planning staff, and the public with the facts needed to make informed decisions. A traditional fiscal impact analysis measures the direct tax revenues produced by the new land use and the associated new employees (in the case of commercial development) or residents along with the cost of the services the local government must provide the new employees or residents (public safety, community outreach, public works, recreation and parks, etc.). It is important to note that the expenditures and revenues developed in the fiscal impact analysis are independent of each other. As a result a fiscal impact analysis differs from the budget process which looks at expenditures based on available revenues.

If revenues are greater than expenditures, a development project or site can be described as having a positive net fiscal impact. Should expenditures exceed revenues, a negative net fiscal impact results. And, if revenues and expenditures are equivalent, the net fiscal impact is said to be neutral.

The fiscal impact analysis completed by ERM and MFSG differs slightly from a traditional analysis that focuses exclusively on prospective developments in that our approach also included the review of several developments which already exist within the City. The existing sites analyses are used as a form of an existing conditions baseline to provide guidance related to future development. It should be noted that our project team used a high level approach to complete the fiscal impact analysis. A more detailed study would require significantly more resources and time to complete. However, it is our opinion that the results of a more detailed analysis, while more precise, would not measurably alter the results and findings of our study.

3.0 Fiscal Impact Analysis Assumptions

With fiscal impact analysis, there are two primary approaches to municipal cost allocations: average costing and marginal costing. Average costing is the simpler and more common approach. It attributes the costs of serving new development according to average cost per unit of service in existing development multiplied by the number of units (typically in the form of population and employees) the growth is estimated to create. Average costing does not take into account excess or deficient capacity (such as roads or parks) to deliver services and it assumes that average costs of municipal services will remain stable in the future.

Alternatively, marginal costing relies on analysis of the demand and supply relationships for public services. This procedure recognizes that excess and deficient capacity exists in communities. It is not uncommon to use both approaches in a fiscal impact analysis, using the average cost approach for operating expenditures and the marginal cost approach for capital expenditures. This is common because the operating expenditures tend to increase fairly consistently with growth over time (matching an average cost approach) whereas capital expenditures vary significantly based on the timing of the need to provide new facilities. To complete the analysis we used this hybrid approach (average cost for operating costs and marginal costs for capital expenditures).

We utilized the per capita multiplier and employment anticipation method to calculate the fiscal impact of existing and future development as outlined in the "Fiscal Impact Handbook[2]" developed by Robert W. Burchell. This method calculates the costs and revenues on a per capita and per employee basis which allows for the determination of expenditures and revenues based on the number of individuals and/or employees associated with an existing or new development.

It is important to note that our analysis only includes expenses and revenues related to services provided by the City. Services provided by the County, such as public education and libraries, and any services provided by the State were not included in our analysis because the City does not bear the fiscal responsibility for providing such services.

The following assumptions were made in the completion of the fiscal impact analysis.

3.1 Operating Expenditures and Revenues

The fiscal impact analysis includes all operating costs associated with existing or future development as captured in the City's General Fund. The costs associated with the City's utility enterprise funds (water, sewer, stormwater or other) were excluded from the analysis as these services are designed to be self-supporting. Similarly, on the revenue side, only General Fund revenues were included in the analysis; i.e. revenues from the state or other outside entities were not included as mentioned above. The Fiscal Year 2012 and 2013 General Fund budgeted expenditures and revenues were used as the basis for the analysis. The expenditures and revenues were forecasted over a 20 year projection period.

3.2 Capital Expenditures

In 2008, MFSG completed a Development Fiscal Impact Fee Study[3] for the City. The study included a detailed analysis of capital costs associated with providing services to new development and the resulting fee that the City could potentially impose to recover these costs. The analysis examined the marginal cost by development type of providing public safety, refuse collection, transportation and streets, parks and recreation and general government buildings. These costs, brought up to current dollars, were used to estimate the capital expenses related to development in this fiscal impact analysis.

3.3 Allocation of Expenses and Revenues

To complete the fiscal impact analysis it was necessary to allocate General Fund operating expenses between those that are incurred by the City due to residential demands for service versus non-residential demands. The expenditures were allocated based on type of

[2] Burchell, R.W. "The Fiscal Impact Handbook." The Center for Urban Policy Research: New Brunswick, NJ, 1978.
[3] The Development Impact Fee Study is available on the City's website, www.rockvillemd.gov.

expense but were generally split based on a weighted average of the number of parcels, assessed value and residential population compared to employees. This resulted in an expenditures allocation of 70.66% residential and 29.34% non-residential. Revenues generated within the City (such as fees and charges for service, but excluding property taxes) were also allocated. The same allocation factor was used when an individual type of revenue is generated by both residential and non-residential development. However, whenever possible, revenues were split based on City staff knowledge of what type of development generates the revenues. For example, personal property taxes (which are only assessed to non-residential properties) were allocated 100% to non-residential.

3.4 Economic Assumptions

The fiscal impact analysis was conducted utilizing a twenty-year projection period and it was assumed that the current distribution of expenditures and revenues will remain the same during the projection period. The following economic assumptions were made to forecast revenues and expenditures over the projection period:

- Property tax rate (per $100 of assessed value) $0.292
- Growth rate/Appreciation rate of real property: 2.00%
- Inflation rate of expenses: 3.00%
- Maturity on financed capital 20 years
- Interest rate on borrowing 4.00%
- Growth in non-property tax revenues 3.00%

3.5 Demographics

The current and projected future demographics within the City serve as the basis for the costs and revenues per capita and per employee. For our analysis the City provided existing population, household and employment figures along with a thirty-year forecast for each in five year increments. The data was developed by the City as part of the Round 8.2 Cooperative Forecast for the Metropolitan Washington Council of Governments (MWCOG). Table 1 presents summary level information of the projections.

Table 1 - City of Rockville Demographic Projections

Demographic	2012	2032	Average Annual Change
Population	62,315	77,072	1.07%
Employees	74,760	96,378	1.28%
Households	25,721	32,634	1.20%

The City also provided a breakdown of the number of households by type within the City. These figures were developed as part of the "Residential Units and Estimated Population" report developed by the City in June, 2012. The persons per household are used in the analysis to estimate the number of new persons living in the City as a result of specific types of development. The figures calculated from the City's study are presented in Table2.

Table 2 - City of Rockville Persons Per Household

Household Type	Persons Per Household
Single Family	2.88
Townhomes	2.41
Multi-Family	1.99
Assisted Living / Other	1.53

It should be noted that multi-family households include condominiums and apartment units. Based on our experience there are typically more persons per household in condominiums than in apartments, however in the case of the City this could not be confirmed as detailed data is not available for this housing class. This is noted because the persons per household factors shown in Table 2 are a key component of the fiscal impact analysis since the figures are used to develop estimates of increases in population associated with varies types of development. The impact of these assumptions are discussed in more detail later in this report.

Table 3 presents the estimated number of employees associated with various types of non-residential development within the City.

Table 3 - Estimated Employees By Type of Development

Type of Development	Employees per 1,000 Square Feet[4]
Retail	2.5
Office	4.0
Hotel	0.75

3.6 Non-Fiscal Factors

It should be noted that the fiscal impact is only one of many factors that must be examined when evaluating new development. There are a host of environmental, economic and social considerations that are not factored into this analysis.

[4] US Bureau of Labor and Statistics

II. FISCAL IMPACT ANALYSIS SITES

As mentioned above, our analysis differs from a traditional fiscal impact analysis in that existing developments were included in the analysis. However it is not the intent of the analysis to demonstrate whether existing properties are fiscally positive or negative but rather to use properties that are representative of and have similar characteristics to future potential development within the City. One of the benefits in using these development sites is that their specifics are known and do not have to be estimated. In addition to the existing sites, several future developments were selected for evaluation in the analysis. All of the sites were selected in consultation with City staff.

1.0 Existing Development

The following existing sites were selected for in the analysis. It should be noted that these sites do not represent "typical" existing development within the City; they were selected because they have the characteristics of potential future development.

Single Family Residential

Two existing single family homes[5]. The specifics include the following:

> Average assessed value: $620,050 (actual)
> Assumed people per household: 2.88 (Table 2)

Multi-Family Residential

The Westchester at Town Center apartment complex. The specifics for these apartments include the following:

> Assessed value: $38,349,888 (actual)
> Apartment Units: 192 (actual)
> Assumed people per unit: 1.99 (Table 2)

Mixed Use

The Alaire, a mixed use development consisting of apartments and retail. The specifics for this mixed use development include the following:

> Assessed value: $64,749,969 (estimated[6])
> Apartment Units: 279 (actual)
> Assumed people per unit: 1.99 (Table 2)
> Retail space: 17,939 square feet (actual)

[5] This report does not give addresses to protect privacy.
[6] Currently valued higher, but currently being appealed. Estimated value based on comparables.

2.0 Future Development

Two future development sites were selected for the fiscal impact analysis. They were selected because they are either currently under construction or were recently approved with some of the specifics regarding the developments readily available.

Mixed Use (Apartments and Retail)
1800 Rockville Pike is a planned mixed use development consisting of apartments and retail. The specifics for this mixed use development include the following:

Assessed value: $104,444,410 (based on comparables[7])
Apartment Units: 356 (estimate)
Retail space: 99,550 square feet (estimate)

The estimated size of the 1800 Rockville Pike development (number of apartments and retail space) was provided by the City based on recently approved plans.

Mixed Use (Apartments, Retail and Hotel)
The Duball, a planned mixed use development consisting of apartments, retail and a hotel. The specifics for this mixed use development include the following:

Assessed value: $151,143,765 (based on comparables[8])
Apartment Units: 485 (estimate)
Retail space: 45,000 square feet (estimate)
Hotel space: 84,150 square feet (estimate)

The estimated size of the Duball development (number of apartments, retail space and size of hotel) was provided by the City based on current plans.

[7] Assessed value (land and improvements) of apartments units based on assessed value of the Alaire, retails space based on retail parcel built concurrent with Congressional South development located at 1701 Rockville Pike.
[8] Assessed value (land and improvements) of apartments units and retails space based on comparable developments within Rockville Town Square. Assessed value (land and improvements) of the hotel space is based on the current assessed value of the Holiday Inn Express.

III. INCREMENTAL REVENUES AND EXPENSES

As mentioned above, fiscal impact analysis examines the revenues and expenses related to development independently. This section of the report details the methodology used to calculate the incremental revenues and expenses used in the study including the calculated per capita and per employee revenues and expenditures based on the City's current demographics and General Fund budget.

1.0 Property Tax Revenues

The primary source of revenues to fund General Fund activities is from property taxes which represent approximately 56% of General Fund revenues. To determine the annual property taxes generated from each of the developments, the assessed value of the site was multiplied by the current property tax rate of $0.292. Future property taxes were calculated based on the assumptions mentioned above. The assessed values for future properties (The Duball and 1800 Rockville Pike) were estimated based on comparable existing properties within the City as footnoted.

2.0 Other Revenues

Non-property tax or other revenues consist of the remainder of revenues within the General Fund. These revenues come from a wide variety of sources and are categorized by the City in the following manner:

- Revenue from Other Governments
- Fines and Forfeitures
- Charges for Services
- Use of Money and Property
- Licenses and Permits
- Other Revenue / Administrative Charges

The single largest revenue source outside of property taxes is income taxes which is included in the Revenue from Other Governments category as the State and Montgomery County collect income taxes and transfer a portion of them to the City.

To calculate other revenues generated by development, revenues from the City's Adopted FY 2013 Operating Budget were evaluated. The standard approach to evaluating other revenues in relation to development is to calculate the revenue per capita and per employee. This approach allows for a determination of the revenue generated based on type of development and the resulting increase in population or employees resulting from the development.

The first step in the calculation was to divide the "other revenue" between residential and non-residential properties. Specific revenue line items were allocated as to whether they were related to residential development, commercial development or both. For revenue items that were relevant to both residential and commercial development, based on a weighted average of the number of parcels, assessed value and population to employees. This results in an allocation factor of 70.66% residential and 29.34% non-residential. The allocation of non-property tax revenues between residential and non-residential results in an annual amount of revenue generated from residential properties and non-residential properties. These revenues can then be used to develop a per capita revenue (residential non-property tax revenues divided by City population). The same can be calculated for non-residential per employee revenue. Table 4 presents the current revenues per capita and per employee and at the end of the projection period 2032.

Table 4 - Per Capita and Per Employee Other Revenues (non property tax)

	2012	2032
Revenue Per Capita	$345.50	$505.94
Revenue Per Employee	$142.63	$203.59

The per capita and per employee other revenues shown in Table 4 were used to calculate the amount of revenue generated from each site based on the estimated population and/or employees at each development.

3.0 Operating Expenses

Operating expenses generated by development are calculated in the same manner as other revenues, as explained above. To calculate expenses generated by development, the operating expenses from the City's Adopted FY 2013 Operating Budget were used. The review of the expenditures was completed at the departmental level within the operating budget. The departments identified in the budget include public works, police, recreation and parks, finance, human resources, city manager, city attorney, mayor and council, information technology, community planning and development services and non-department. The expenses within these departments were allocated based on whether they were related to residential development, non-residential development or both. For expense items that were relevant to both residential and non-residential development, the residential to non-residential allocation split of 70.66% to 29.34% was used. All expense items were assumed to increase by the 3.00% annual inflation rate previously mentioned. The analysis resulted in a split of operating expenses between those that are related to serving residential properties and those related to non-residential which allowed for the calculation of the per capita and per employee operating expenses.

The last step in the analysis of operating expenses was to account for the reduced operating costs associated with providing some services to multifamily residential properties compared to single family and townhomes due to efficiencies in providing services. Specifically, due to the fact that the City Code requires 10% of a typical[9] multi-family site to be open space / public use

[9] Section 25.13.05 of the City Code requires a sliding scale of public use space for projects in mixed use (mx) zones.

areas, it was assumed that the residents at these properties place a lesser demand on the City's parks and recreation facilities. Operating expenses for parks and recreation account for nearly 35% of the operating budget, reduced demand for services in this area are not insignificant. To account for this reduced demand on the park system, a reduction factor of 3.5% was applied to per capita costs for multifamily developments (35% of operating costs times 10% open space). It should be noted that there are additionally reduced demands for services related to services provided to multifamily properties in comparison to single family properties. However based on the scope of this study these efficiencies were not analyzed nor are they in a typical fiscal impact analysis using the per capita / employee methodology. The fact that there are fewer persons per household in multifamily developments per unit compared to single family homes results in a lower total cost per unit for multifamily which is also assumed to account for the lower demand for services and efficiencies.

Table 5 presents the calculated operating costs per capita / employee.

Table 5 - Per Capita and Per Employee Operating Expenses

	2012	2032
Operating Expense Per Capita (Single Family / Townhomes)	$646.05	$930.13
Operating Expense Per Capita (Multi-family)	$623.44	$897.58
Operating Expense Per Employee	$223.62	$307.97

The per capita and per employee operating expenses shown in Table 5 were used to calculate the operating expenses related to each site based on the estimated population and/or number of employees at each development.

4.0 Capital Expenses

As mentioned above, in 2008, MFSG completed a Development Fiscal Impact Fee analysis for the City. The analysis examined the marginal cost by development type of providing public safety, refuse collection, transportation and street, parks and recreation and general government buildings. These costs, brought up to current dollars, were used to estimate the capital expenses related to development in the analysis. Table 6 presents the capital costs associated with each type of development.

Table 6 - Capital Expense Per Type of Development

Type of Development	People per Household / per Square Foot	Capital Cost - 2013
Residential (per household)		
Single Family	2.88	$3,591
Townhome	1.99	$3,184
Multifamily	1.99	$2,192
Non-Residential (per 1,000 square feet)		
Retail	2.5	$1,115
Office	4.0	$1,581
Other	0.75	$759

The figures in Table 6 represent the estimate capital costs incurred by the City in providing services to development within the City. Since the City typically finances capital improvements, it was assumed that these costs would be incurred over a 20 year period to match typical financing terms.

IV. FISCAL IMPACT ANALYSIS RESULTS

The calculation of the per capita/employee revenues and expenses allows for the evaluation of the fiscal impact of each of the development sites selected for the study. The results of the fiscal impact analysis for each site are outlined in this section.

1.0 Existing Development

The following tables and figures present the results of the fiscal impact analysis for the selected existing developments within the City. The results demonstrate the annual revenue and expenditures generated at each site.

Existing Single Family Residential

Figure 1.0 - Single Family Residential - Annual Net Fiscal Impact

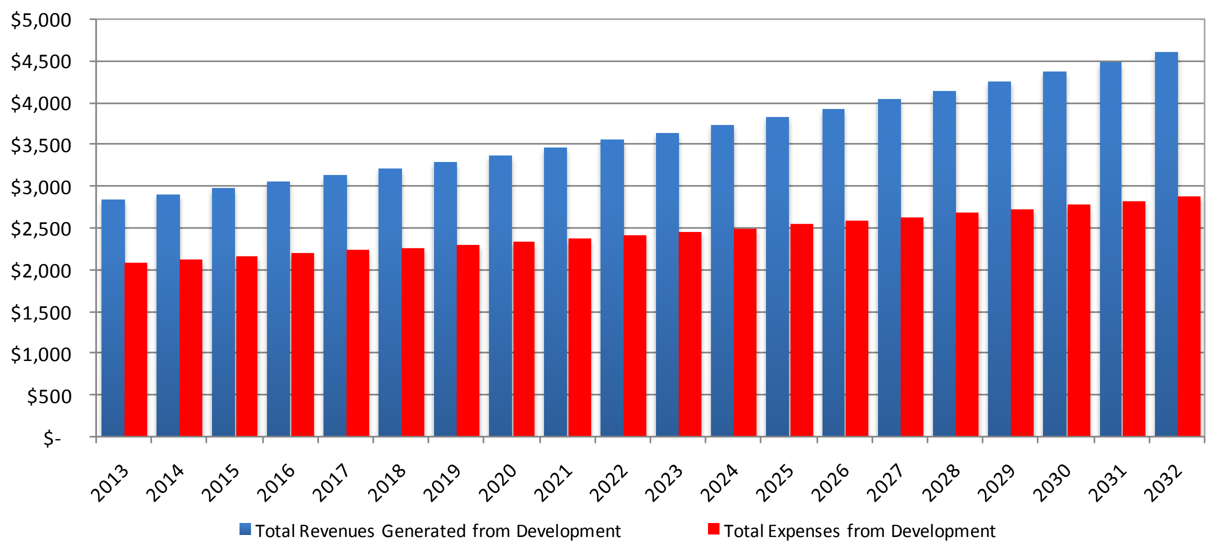


Table 7.0 - Single Family Residential Fiscal Impact Summary

Revenues / Expenses	Result
20-Year Revenues	$77,596
20-Year General Fund Operating Expenses	$46,685
20-Year Capital Expenses	$5,284
20-Year Net Fiscal Impact	**$25,627**
Average Annual Net Fiscal Impact	**$1,220**

Figure 1.0 and Table 7.0 demonstrate that the existing residential properties selected for the analysis are fiscally positive (the properties generate more revenues than expenses). On average, over the projection period, the properties generate $1,220 in annual revenue over

expenses. The primary reason for the positive result is due to the high assessed value of the properties with an average of $620,050. A significant number of properties in the City are currently assessed at less than $620,000. The data in our analysis demonstrates that any single family residence within the City with an assessed value over $315,000 generates more revenue than expenses. The average assessed value for single family (detached) residential properties in Rockville is $458,789.

Existing Multi-Family Residential

Figure 2.0 - Westchester at Town Center - Fiscal Impact Analysis

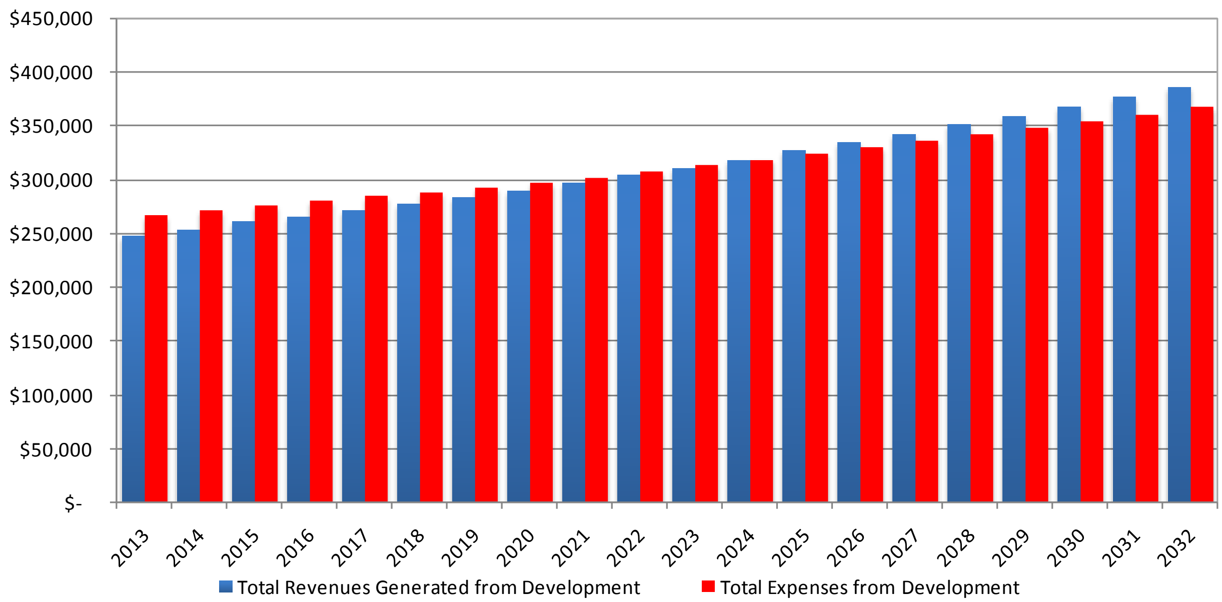


Table 8.0 - Westchester at Town Center Fiscal Impact Summary

Revenues / Expenses	Result
20-Year Revenues	$6,617,617
20-Year GF Operating Expenses	$5,976,781
20-Year Capital Expenses	$619,289
20-Year Net Fiscal Impact	**$21,547**
Average Annual Net Fiscal Impact	**$1,026**

Figure 2.0 and Table 8.0 demonstrate that the existing multi-family development, Westchester at Town Center has a positive net fiscal impact on the City. On average, over the projection period, the development generates annual revenues exceeding expenditures of just over $1,000. Similar to the single family residential properties discussed above, the assessed value of the Westchester at Town Center ($38,349,000 or $199,000 per apartment unit) is above that which would result in a negative net fiscal impact. Based on our analysis a multifamily apartment unit within the City with an assessed value below $195,000 would require more in services (expenses) then it would generate in revenues, resulting in a negative net fiscal impact.

However, it is very important to note that the Westchester at Town Center is an apartment complex and as such it was assumed that the persons per apartment unit are 1.99 as shown in Table 2. As mentioned previously in this report, the persons per household factor of 1.99 is based on all multifamily housing in the City, including condominiums. The fiscal impact of a development like Westchester will be significantly altered if in fact the number of persons per household is higher or lower than 1.99. To demonstrate this impact, if the persons per household is reduced from 1.99 to 1.5 the annual average net fiscal impact for the Westchester property becomes approximately $31,000.

Existing Mixed Use

Figure 3.0 - The Alaire - Fiscal Impact Analysis

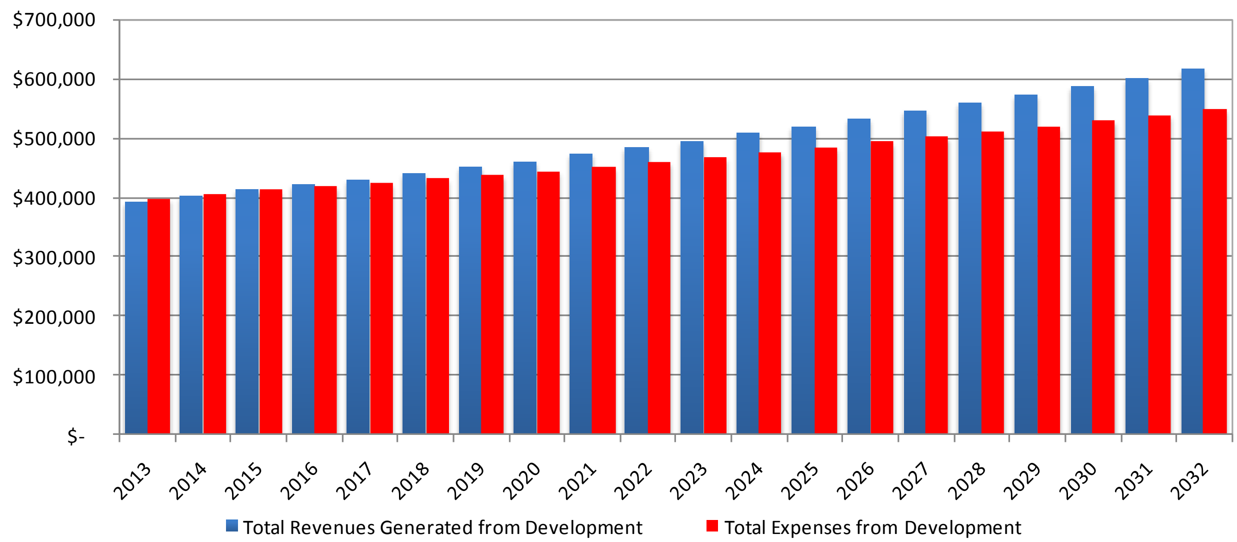


Table 9.0 - The Alaire Fiscal Impact Summary

Revenues / Expenses	Result
20-Year Revenues	$10,538,499
20-Year GF Operating Expenses	$8,935,512
20-Year Capital Expenses	$929,333
20-Year Net Fiscal Impact	**$673,654**
Average Annual Net Fiscal Impact	**$32,079**

Figure 3.0 and Table 9.0 demonstrate that The Alaire existing mixed use development has a positive net fiscal impact on the City. On average, over the projection period, the development generates annual revenues exceeding expenditures of just over $32,000. The reason for the positive net fiscal impact is due to the high assessed value of the apartment units at $218,000 per unit and also due to the fact that this property includes retail space which generally results in a positive net fiscal impact. Based on our analysis, retail space will have a positive impact net

fiscal impact as long as the assessed value for the retail space is greater than $75 per square foot. The assessed value per square foot of retail space within the Alaire is $209.

2.0 Future Development

The following tables and figures present the results of the fiscal impact analysis for the selected future developments within the City. The results demonstrate the annual revenue and expenditures generated at each site.

Future Mixed Use

Figure 4.0 - 1800 Rockville Pike - Fiscal Impact Analysis

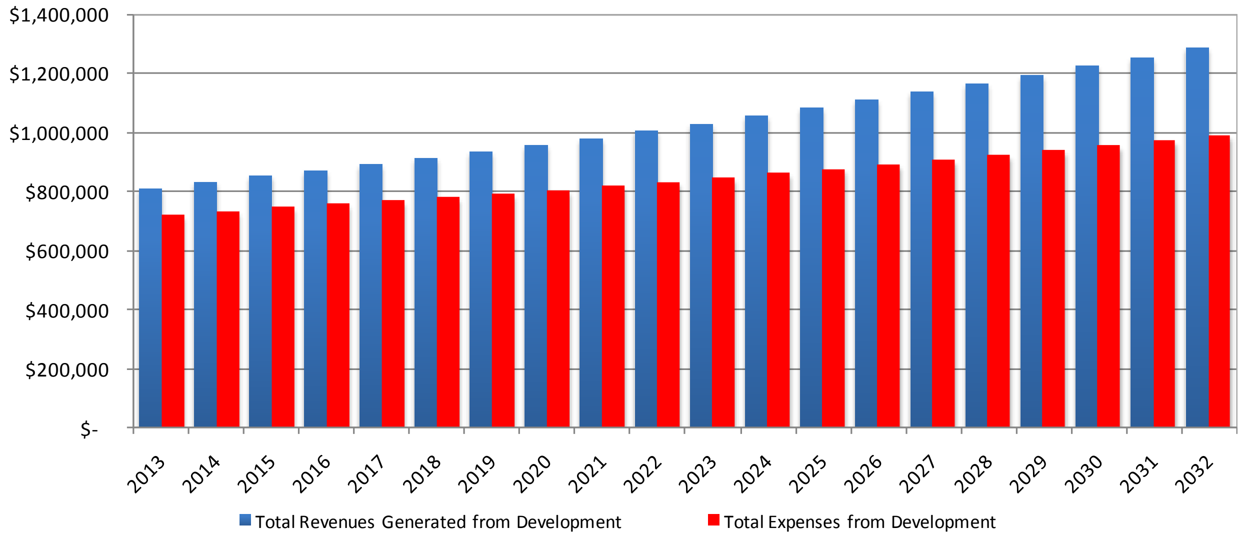
Table 10.0 - 1800 Rockville Pike Fiscal Impact Summary

Revenues / Expenses	Result
20-Year Revenues	$15,986,889
20-Year GF Operating Expenses	$12,471,373
20-Year Capital Expenses	$1,311,497
20-Year Net Fiscal Impact	**$2,204,020**
Average Annual Net Fiscal Impact	**$104,953**

Figure 4.0 and Table 10.0 demonstrate that the future mixed use development, 1800 Rockville Pike will have a positive net fiscal impact on the City. On average, over the projection period, the development would generate annual revenues exceeding expenditures of over $100,000. Similar to The Alaire, 1800 Rockville Pike was estimated to have an assessed value of $218,000 per apartment unit. The retail space was estimated to be $267 per square foot based on a

comparable property within the City (specifically based on the retail parcel built concurrent with Congressional South development located at 1701 Rockville Pike).

Figure 5.0 - The Duball - Fiscal Impact Analysis



11.0 - The Duball Fiscal Impact Summary

Revenues / Expenses	Result
20-Year Revenues	$21,913,904
20-Year GF Operating Expenses	$16,078,504
20-Year Capital Expenses	$1,732,196
20-Year Net Fiscal Impact	**$4,103,204**
Average Annual Net Fiscal Impact	**$195,391**

Figure 5.0 and Table 11.0 demonstrate that the future mixed use development, The Duball will have a positive net fiscal impact on the City. On average, over the project period, the development would generate annual revenues exceeding expenditures of over $190,000. The assessed per apartment unit was estimated to be $278,000 per unit and retail space was estimated to be $216 per square foot based on comparable properties within Rockville Town Square. In addition to apartments and retail, The Duball will include a hotel. The assessed value per square foot of hotel space was estimated to be $77 which was estimated based on the assessed value of the Holiday Inn Express. Based on our analysis, a hotel will have a positive impact fiscal impact as long as the assessed value for the hotel is greater than $32 per square foot.

V. SUMMARY OF FISCAL IMPACT ANALYSIS

The fiscal impact analysis for the developments selected in the study all demonstrate positive fiscal impacts. A summary of the average annual net fiscal impact for each of the developments over the project period is presented in Table 12.

Table 12 - Summary of Development Average Annual Net Fiscal Impacts

Development	Average Annual Net Fiscal Impact
Existing Single Family Residential	$1,220
Existing Multifamily Residential (Westchester at Town Center)	$1,026
Existing Mixed Use (The Alaire)	$32,079
Future Mixed Use (1800 Rockville Pike)	$104,953
Future Mixed Use (The Duball)	$195,391

As mentioned in the previous section there are a number of reasons why all of the developments selected for the analysis have positive fiscal impacts on the City. The primary reason is due to the assessed value of each of the developments. Since property taxes account for over half of the revenues within the General Fund, the assessed value of a property has a significant impact on whether or not it is fiscally positive or negative. The assessed value breakeven values (minimum assessed value to result in positive net fiscal impact) for each type of development are summarized in Table 13.

Table 13 - Assessed Value Breakeven Values

Development	Assessed Value Breakeven
Existing Single Family Residential	$315,000
Existing Multifamily Residential	$190,000
Retail Space (per square foot)	$75
Office Space (per square foot)	$117
Hotel (per square foot)	$32

It should be noted that the values presented in Table 13 assume an average number of individuals per type of development as mentioned in Tables 2 and 3 and that variations in these figures would result in differing breakeven values.

In addition to property taxes and the assessed values of the properties included in the analysis, another factor resulting in positive fiscal impacts for the developments is a result of the type of development selected for the analysis. In general, the more non-residential property (particularly retail and hotel) within a development the more positive the fiscal impact on the City. This is demonstrated in Table 12 in which the Duball has the greatest amount of non-residential property with 129,150 square feet within the development followed by 1800 Rockville Pike with 99,500 square feet followed lastly by the Alaire with 17,939 square feet.

APPENDIX

As part of the analysis, ERM conducted a limited literature search for studies analyzing the fiscal impact of development in ways similar to Rockville's interests. ERM also reached out to some academics in the field.

ERM searched for articles in the Journal of the American Planning Association through the scholarly search engine Taylor & Francis Online. Key phrases queried included: Fiscal impact analysis, cost of services, residential development and tax impact of residential development. These searches resulted in articles comparing general fiscal impacts of residential versus other land uses, but no articles comparing the fiscal impact of residential development by price point or by residential unit type. The search was widened to include all journals available through Taylor & Francis but resulted in no suitable articles. Similar search terms were also used on Planetizen, a popular urban planning website and Maryland Department of Planning's website. These searches yielded no results specific to fiscal impacts related to price points or residential unit types.

A web search using the Google search engine yielded several results.

A 1997 study administered by Purdue University: The Fiscal Impact of Residential Development in Unincorporated Wabash Township by Dr. Larry DeBoer and Lei Zhou. This study found a correlation between housing prices and level of fiscal impact. The study analyzed the fiscal impacts to Tippecanoe County, Wabash Township and Tippecanoe School Corporation from four specific developments with the following home types: Expensive single family homes, medium priced single family homes, moderately priced single family homes and a mobile home park. It was found that the more expensive homes created a positive fiscal impact while moderate to low priced homes caused a negative fiscal impact. Medium priced homes were found to have both positive and negative impacts to the various levels of government. The authors concluded that their results were consistent with the results of many other studies in other states.

A 2011 study, Cost of Land Use Fiscal Impact Analysis: The Fiscal Impacts of Compatible and Incompatible Land Use in the Fort Bragg Region (North Carolina) by TischlerBise found similar results. Of the three counties in the study, developments of average priced single family homes had a negative or neutral fiscal impact. Large lot development (10+ acres) and higher value homes produced a positive fiscal impact.

A 2002 fiscal impact analysis for the Town of Barnstable, Massachusetts (Tischler & Associates) projected that an average assessed value of $311,800 was necessary for a single family house to have a neutral fiscal impact. The study also found that expensive townhouses had the greatest positive impact while moderately priced single family homes had the greatest negative fiscal impact.

Howard County, Maryland's Comprehensive Plan (PlanHoward 2030) Fiscal Impact Analysis was published in 2012. This study analyzed fiscal impacts of two hypothetical countywide land development scenarios: Trends and Maximum. The Trends scenario is based on current development trends and existing zoning/land availability. The Maximum scenario is based on projected development with no capacity limitations and future zoning changes (PUD zoning for example). The Maximum scenario would result in less single family detached housing and more rental apartments. The residential development scenarios are also paired with two market value scenarios: Average Market Values and Lower Market Values (a 15% reduction of average values). In a 20 year projection, the combination of the Trends and Average Market Values has the highest positive fiscal impact on the county with net revenues of $61 million. The combination of Maximum and Lower Market Values created the lowest fiscal impact of $3 million. None of the scenarios projected a negative impact on revenues.

A more extensive literature search could reveal other studies. One difficulty is that this topic was researched quite heavily in the 1980s and 1990s as communities were responding to ways of managing rapid growth and its impacts. One very influential book was *The Fiscal Impact Handbook, The New Practitioner's Guide to Fiscal Impact Analysis* by Robert W. Burchell (1985). Many fiscal impact studies were done by consulting firms and were not published so they are hard to find. Their conclusions tended to be consistent with the studies described above (that higher value homes along with commercial and employment development tended to produce a positive fiscal impact). As a result, this subject is no longer as strong a topic of research as it once was.

We spoke with Dr. Uri Avin, Research Professor, with the National Center for Smart Growth & Education at the University of Maryland. He commented that finding literature and studies regarding the fiscal impact on services caused by residential development is complex because the issue is very place-specific and never generic in nature. Rules of thumb and "industry standards" do not apply because communities have unique markets and tax structures.

Finally, as mentioned in the report, MFSG conducted a Development Fiscal Impact Fee study for the City in 2008. This analysis examined the marginal cost by development type of providing public safety, refuse collection, transportation and streets, parks and recreation and general government buildings. This report can be found at the City's website at http://www.rockvillemd.gov/government/finance.htm.